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U32.1



A dragon eating its tail was once used
as a symbol of a stored program which
could modify itself.

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Cover

Many thanks to Krys Warchol for the drawing on this month's cover.

Publisher

University of Toronto
Computing Services
Toronto, Ontario
Canada M5S 1A1

Editor: William Fehlner

Editorial Assistant & Production: Kathryn Bourne

Publication Date: June 1, 1983.

Subscriptions

Subscription changes should be entered on the tear-out form at the back of this issue, and mailed to *COMPUTERNEWS*, Engineering Annex, Room 207 (or phone 416-978-4990).

COMPUTERNEWS is published 8 times yearly by University of Toronto Computing Services. Enquiries or contributions should be directed to:

The Editor
COMPUTERNEWS
11 King's College Road, Room 207
University of Toronto
Toronto, Ontario
Canada M5S 1A1

Dialogue

Over the past few months the content of *COMPUTERNEWS* has been slowly evolving. On April 6, 1983, it's direction changed abruptly. The reorganization announced that day is described in more detail in "Let's Talk About It". As part of this reorganization, the staff assigned to *COMPUTERNEWS* was substantially reduced. A supervisory position to be added will provide some relief but the former emphasis will not be reestablished.

The primary intent of these changes is to minimize the amount of resources required to produce *COMPUTERNEWS* by cutting out all non-essential material. There has been little feedback from readers over the past few months regarding content. Partly because of this, non-essential has been defined in a way that excludes most of the future plans discussed in "Dialogue" in the April issue. In particular, UTCS management has decided to make *COMPUTER-*

NEWS a newsletter. The emphasis will be on announcing plans, schedules, and alterations to service. Articles which describe options, offer alternatives, or document ways to use available facilities to maximize their effectiveness will no longer be topics for *COMPUTERNEWS*. This information will become incorporated as a part of UTCS's overall documentation of services and products. For example, this is the last issue of *COMPUTERNEWS* which will have articles like "Pattern Matching using SOS", "Getting Started with Datasets", "SAS Utilities", and "Dialogue". Observant readers will notice that "The Advising Corner", user profiles, and staff profiles have already been removed.

The next issue of *COMPUTERNEWS* will have the new format in full. Your comments on these changes are welcome.

Bill Fehlner

Let's Talk About It

Reorganization

Gentle reader, we've just gone through a pretty traumatic time, first in changing the UTCS organization and then in letting eleven people go. You may or may not have seen our broadcast memo on the reorganization, but what I will try to do here is give both a bit more background and, in the following charts, more detail.

The previous UTCS organization was the conscious result of a redeployment and, as such, had as much internal logic as that process permitted. Redeployment as we used it here really meant, first, taking a cut in complement by not filling vacancies.

Next, the people on board were redeployed or used to fill vacancies in a new, smaller and realigned organization. This process tried, to the greatest extent possible, to recognize the strengths of the individuals involved, but led to inevitable mismatches and strange conjunctions. Systems people are specialists with substantially different skills and experience, and are really not easily interchangeable.

I felt the redeployment organization was not as effective as it might be, and decided to reorganize for a number of reasons. I felt the previous organization did not properly

continued...

Reorganization continued

emphasize the core businesses we are in; operations, systems software support, communications and technical support, and user relations. The previous organization was an attempt at a functional organization under the constraints of redeployment. However, it tended to group functions which had no real logical affinity.

Another result we wanted from the reorganization was to emphasize certain services by applying more resources, and de-emphasize or eliminate others which were over-subsidized and under-utilized. I felt UTCS was a bit top heavy in management, with about one-third of UTCS classifiable as either managerial or supervisory. Even with 'working' supervisors, this level was a bit extreme.

The reorganization was, in fact, a consistent, unbiased way to determine which positions to eliminate in order to reduce our budget. We were faced with the necessity of internally reducing our budget by \$329,000. In nearly all cases, we let the people go whose functions were eliminated and whom we did not consciously move to other positions. We applied the principle of taking redundancies where they occurred, as much as possible.

There are a number of ways a systems organization can be structured. The 'vertical integration' mode would have all functions required to produce a 'product' (usually a users computer system) in a single group. Another would be to have specialization based on the users organization structure (the old CSR's). The one we chose, outlined on Chart 1 attached, was a functional organization, much cleaner than the previous one, with a global management process to pull it all together. The new organization aggregates functions so that a manager will generally have to deal with a single functional set of tasks. It makes two of the senior management positions redundant, and they have been eliminated. The attached Charts give more explicit details of the location of everyone in UTCS in the new organization. The new structure

coalesces the seven previous groups (three basic, three value-added and the Business Office) into five, puts the Associate Director explicitly into the chain of command for the two areas requiring the most attention, and eliminates a number of functions.

The piece of the organization which has coalesced the most functions into a single, coherent entity is the User Interface Group. It is structured to eliminate impediments in the communication process with users. It combines the functions of the old Application Support and Advising Group, and the Consulting and Information Services Group. The User Interface, and Accounting and Administration Groups now report to the Associate Director. They are the areas where the most rationalization of functions (in User Interface) and new functions (in Accounting, Administration and Cost Accounting) will occur.

We are explicitly planning to phase-out a few activities, hopefully in ways which will not be too traumatic for the users. The mini-lab (provision of service on the GT-40 and GT-44) will be relinquished as soon as possible. The small systems functions will also be phased-out. This is the provision of special interfaces and entire systems for data gathering and analysis, as well as their maintenance. This was a very highly subsidized service, ripe for elimination. We may transfer the GT-40 and -44 to anyone who will continue the service.

We have reduced our complement by a net of eight FTE's. We have terminated twelve positions, actually let eleven people go, and four new positions have been created to address functions that were previously not provided. We are eliminating a number of supervisory positions and giving the affected personnel other, individual contributor-types of jobs.

We feel that, when we have ironed all the wrinkles out of this change, we will be a more tightly-focused organization, more defensible and more ready to emphasize the user aspects of our services.

continued...

Reorganization continued

This organization, with perhaps a few refinements, will certainly take us through the next fiscal year and perhaps beyond. The organization may change as we enter

new areas of service, but this process will be a planned, gradual evolution.

Warren Jackson

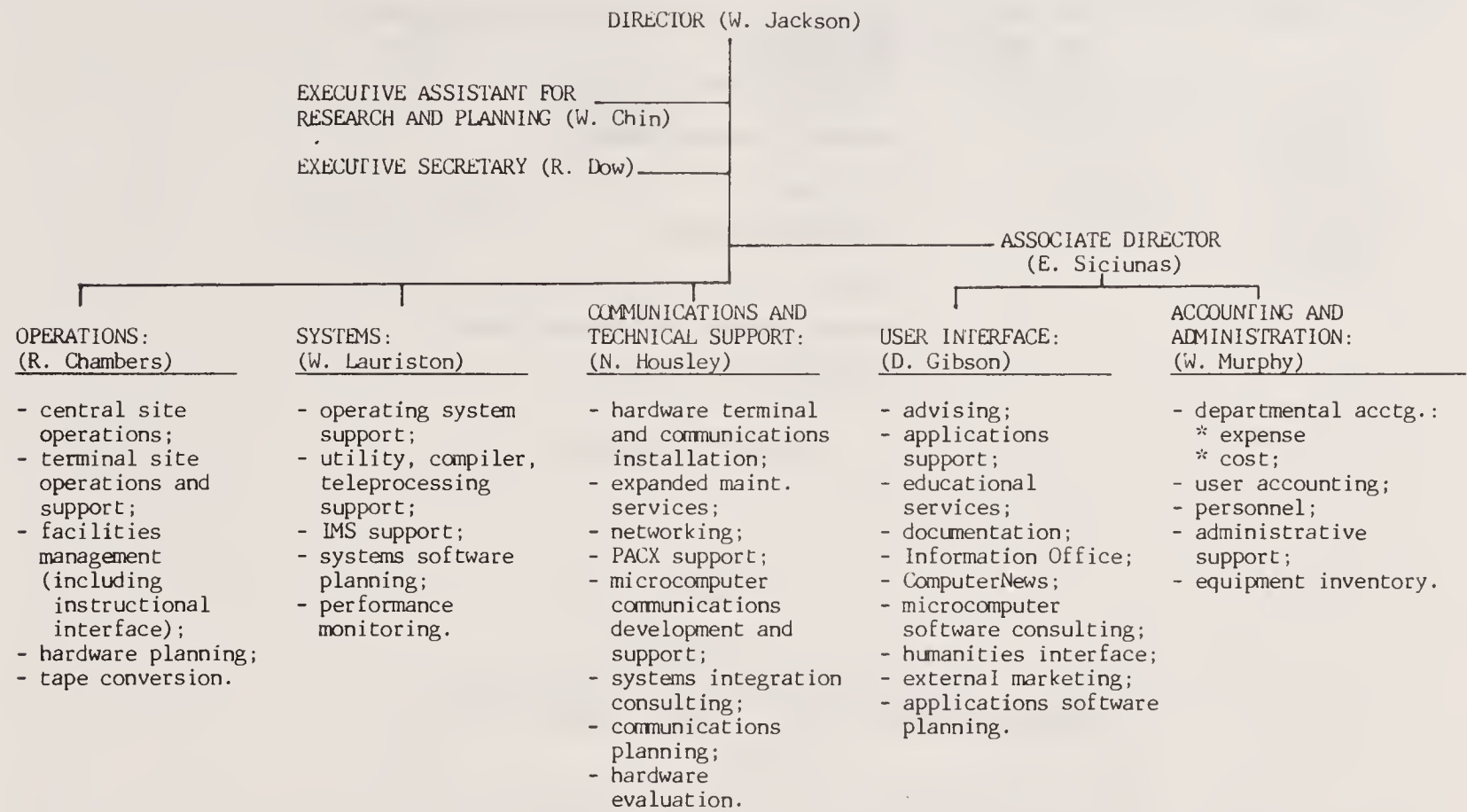


Chart 1: Functional Reorganization at UTCS

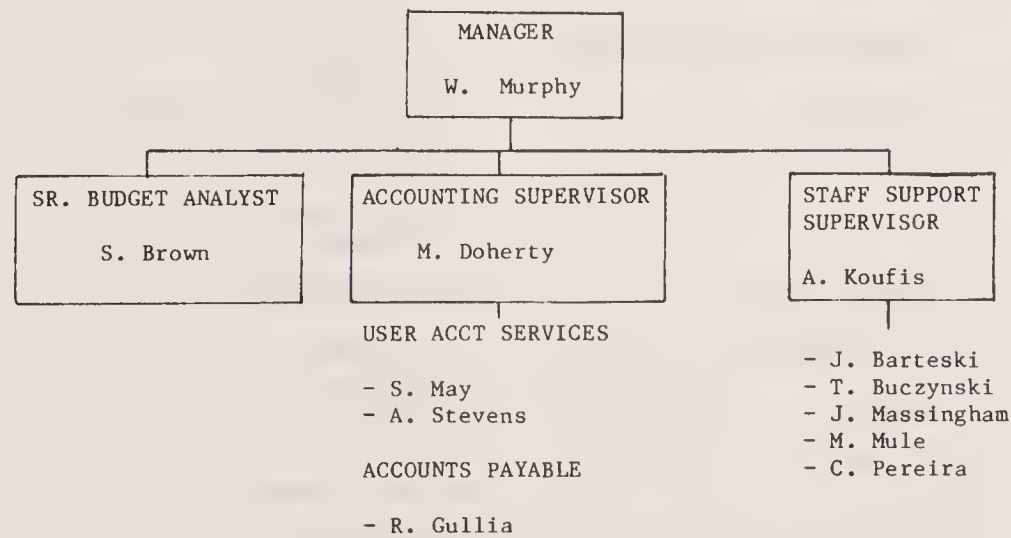


Chart 2: Accounting and Administration

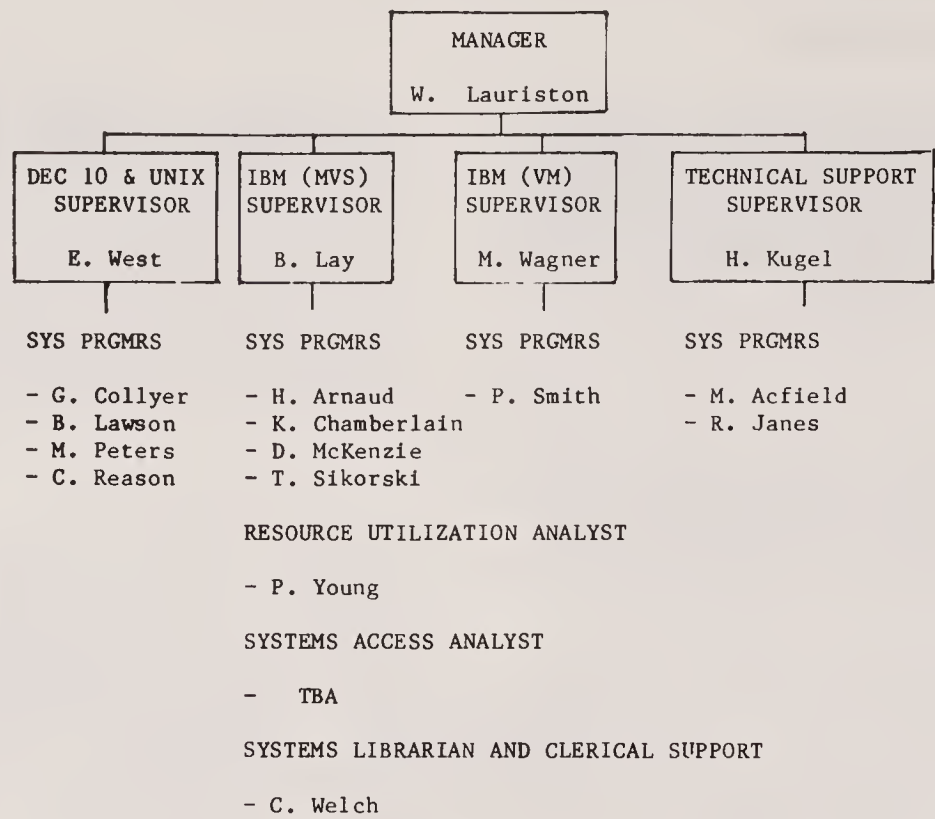


Chart 3: Systems

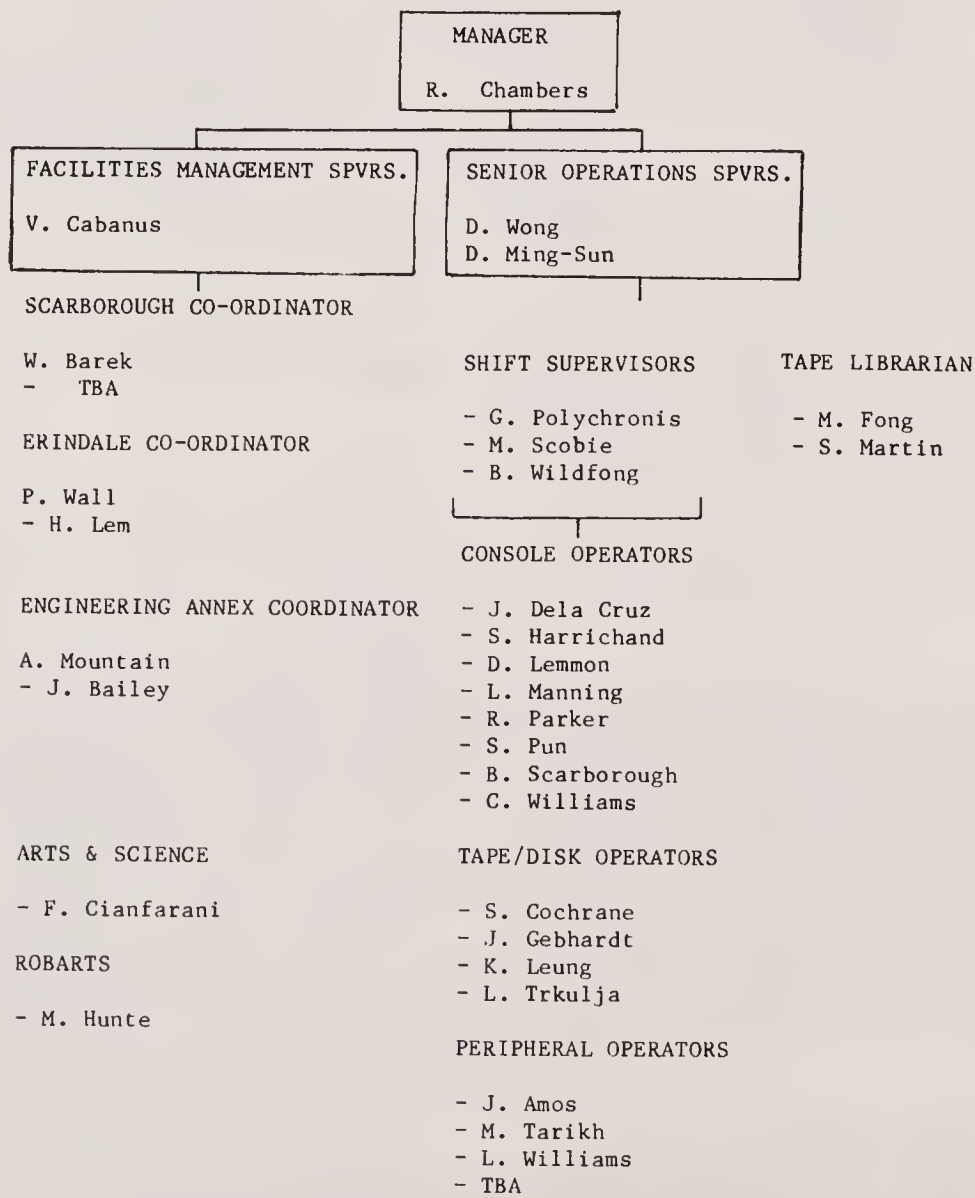


Chart 4: Operations

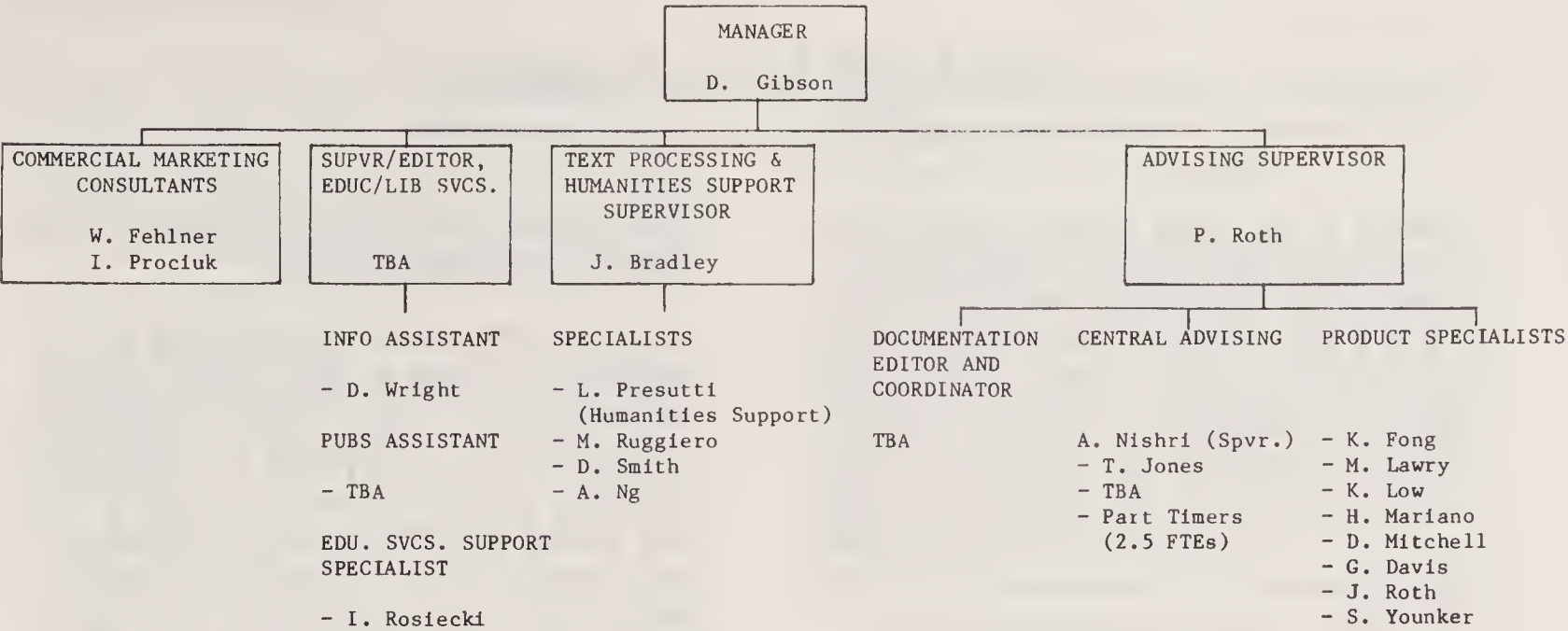


Chart 5: User Interface

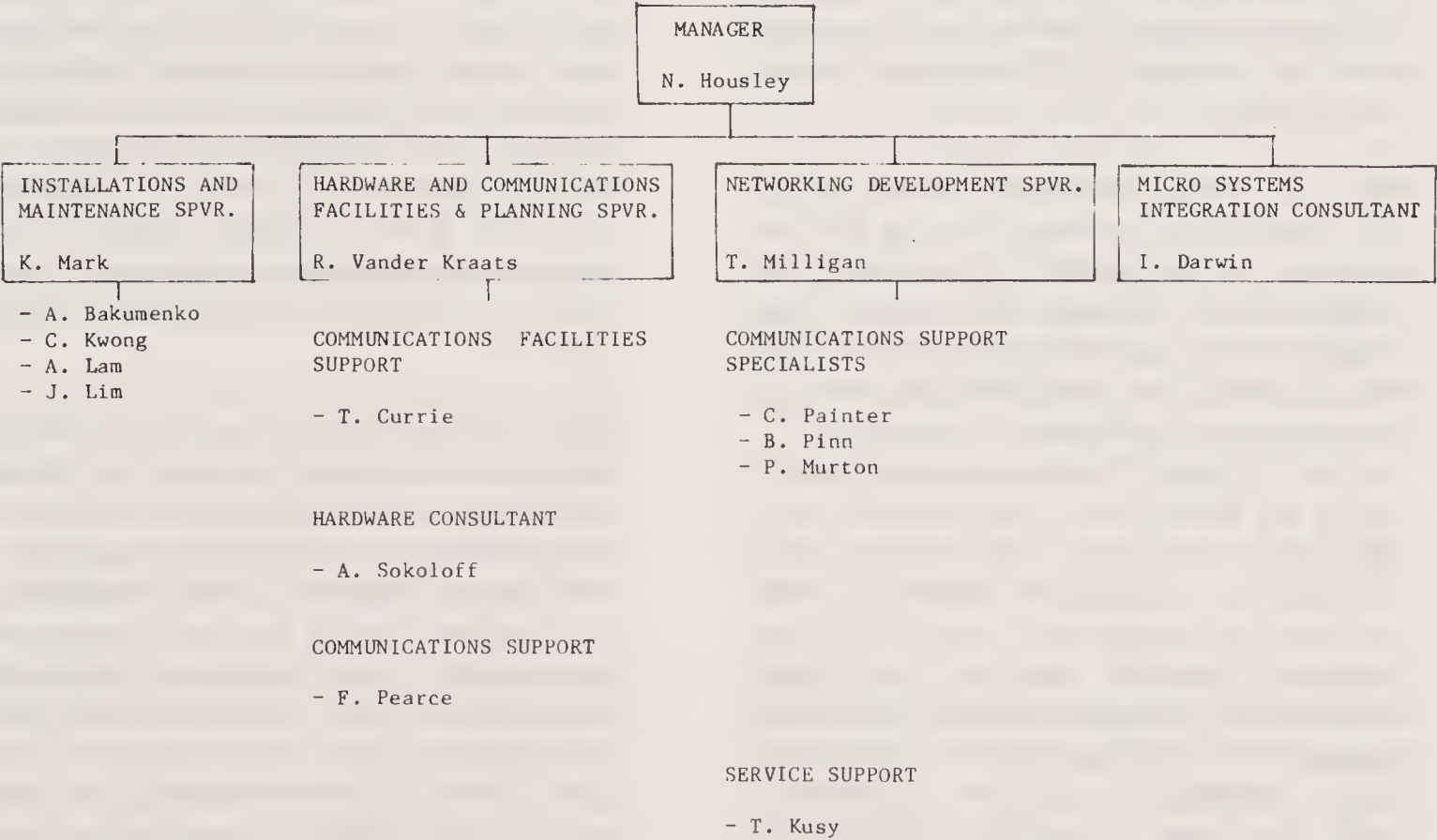


Chart 6: Communications and Technical Support

SHARE 60 in San Francisco

SHARE is the oldest organized user group in the computer industry. Membership is based on an installation operating at least one of a specified list of IBM computers, all of them very large. With over 1,500 member installations, the primary goal is to foster joint research and development and provide a forum for the exchange of ideas pertaining to computer science. Of course, by the nature of its membership, SHARE also forms a very powerful lobby group.

SHARE consists of various projects, committees, and task forces. These are organized into four divisions: Applications, Basic Systems, Communications and Data Base, and Management. Meetings are held four times a year; two major and two minor conferences. The last major was SHARE 60 held in San Francisco, from February 20-25 and was attended by about 4,500 delegates. Taking advantage of airline seat sales and other economies, UTCS was able to send five individuals.

One of the biggest sessions, scheduled after the final agenda came out, was on Software Licensing Agreements. On February 9, two weeks before SHARE was to meet, IBM made its long awaited announcement concerning alteration of all existing software agreements concerning availability of source. Originally IBM had proposed removal of all source and logic manuals for all IBM software products. IBM had contended that this was necessary in order that it protect its programming asset as well as to ease migration, simplify service, and reduce maintenance workload. SHARE was instrumental in opposing IBM, claiming that source and logic manuals were necessary in order to make customer modifications, problem determination, as well as education. The announcement which was widely discussed at SHARE struck a compromise, withdrawing source for many products while allowing source for others. This position should not affect UTCS where we have seen it coming and have removed most

modifications from all our products (both IBM and non-IBM provided).

At the FORTRAN Project meetings one of the topics raised was the increased cost of VS/FORTRAN over older FORTRAN compilers. The FORTRAN G family of compilers was contracted out of IBM and was written in POPS, a macro preprocessor. The FORTRAN H family was written in FORTRAN; whenever a new optimization feature was added the compiler was fed to itself so that the compile and run were both improved. For VS/FORTRAN, IBM has completely re-written the code into PLS, an unreleased language used by IBM for all its software. VS/FORTRAN compiles tend to be more expensive because PLS is presumably not as good an optimizer of code as FORTRAN H was. As well VS/FORTRAN takes up more memory because the compiler is no longer overlaid and because it uses virtual storage instead of scratch files. One of the Fortran Project members presented a benchmark showing that VS/FORTRAN compiles were 80% more expensive than FORTRAN H. Of course this varies with program mix and with the charging algorithms on particular installation uses.

More distressing was that this member's benchmarks appeared to show that the execution cost of programs compiled by VS/FORTRAN tended to be from 7% to 35% more expensive. Other members of the Fortran Project had not encountered such a difference so this will require more investigation. (The reason of this degradation appeared from his benchmarks to be the VS/FORTRAN runtime library. When he ran FORTRAN H compiled programs with the VS/FORTRAN runtime library he got an increase in costs.)

Between the sessions there was time to make contact with other Conference attendees. We had one very interesting conversation with a representative of the SAS In-

continued...

SHARE 60 continued

stitute. He explained how Portable SAS and IBM SAS will be distinct products for the foreseeable future. To make SAS portable it was almost entirely written in PL/I. For this reason and because the DATA step will be interpreted (instead of compiled as in the IBM version), Portable SAS is expected to be at least an order of magnitude slower. He also went on to explain that since Portable SAS is a 'new product' many features of IBM SAS which were added *ad hoc* from release to release have been consolidated. This means that you can't just move your IBM SAS programs to Portable SAS and expect them to work without

change. There is currently a proposal that UTCS acquire a version of Portable SAS for installation on a VAX machine.

By sending people to SHARE we are able to get valuable information as well as establishing contacts with other installations. For future reference the next major SHAREs are in New York (August 21-26, 1983), Anaheim (March 4-9, 1984), Miami (August 12-17, 1984) and Los Angeles (February 24-March 1, 1985).

Alex Nishri

Getting Started with Datasets: Final

Ahh, there's nothing like a sabbatical to clear out the old cobwebs and gain new perspectives! JW (Joe Wylbur User, remember?) now realizes that his campaign to save keypunches, although enthusiastic, was (shall we politely say?) misdirected. He couldn't even get support from the environmentalists when he told them that many keypunches could become extinct at U of T by the Fall!

But JW is no slouch. He knows how to turn a potential disaster into a grant-getting benefit! He will write a paper on the *Migratory Patterns of Card Users to Interactive Systems!* Since the data is accumulating at an ever increasing rate, JW has decided to take the rational approach and hire an assistant, KT (Ken Throughput) to do the data entry using WYLBUR. JW realizes that WYLBUR is a wonderful tool but has some pitfalls for the novice user. He decides that it might be best to review with KT some of the dataset conventions used at UTCS along with the cataloguing and accounting aspects of dataset management. First, all datasets *saved* online should have a *unique name*. The *name* of the dataset is stored in the system catalogue along with a pointer to its actual physical location. Second, the

name is also stored in the VTOC (Volume Table Of Contents) of the physical disk drive upon which the dataset resides. (JW decides not to tell KT that the VTOC also holds the dataset DCBs and track addresses. Might confuse the poor boy.) Third, if a dataset is to remain on the system for more than a day, it must be registered. The WYLBUR DO REGISTER command enters the dataset *name* into the accounting file along with the account number (SAC) that owns it. And finally, to properly delete a dataset, KT should use the DO SCRATCH command in WYLBUR.

Well, armed with all this knowledge, what could possibly go wrong?....

.....Weeks later....Just a bit more work to do and KT will have entered all the necessary data. Since he has been storing the information in a dataset called U01234.MIGRATE, KT issues the WYLBUR command

```
use migrate clear
```

to bring the dataset into his *active* area and proceeds to type in the last few lines. However, in its current WYLBUR format the

continued...

Getting Started continued

dataset is not suitable as input data into the statistical package KT wants to use (i.e., SAS). The reason is that WYLBUR compresses the dataset by not storing unnecessary blanks. Although this is an efficient and cost saving method of online storage, some of those blanks are necessary for the analysis. KT wants to *replace* the current online version of his data with the contents of his *active* area such that all blanks are preserved and each line is filled out to a length of 132 characters padding with blanks if necessary. He issues the command

```
save migrate lrecl 132 replace
```

However, a strange message suddenly appears!

```
AFTER SCRATCH ON USER01,
U01234.MIGRATE CAN'T FIND SPACE
ON USER01
```

Oh, oh. Now what? The message *seems* to indicate that the dataset has been scratched (i.e., deleted) from USER01. Not quite sure of what's happening and with JW off on another of his speaking tours, KT's appraisal of the situation indicates a call to 978-HELP would be his best bet. The advisor explains what has occurred. Before *replacing* the online version of his dataset with the current contents of his *active* area in the new format (i.e., lrecl 132), WYLBUR first deletes the online version. This involves removing the *name* from the VTOC of USER01. This is equivalent to saying that the dataset is no longer on that disk. WYLBUR then tries to *copy* the active area back onto USER01 using whatever available space it could find. However, there was not enough space on USER01 to hold the new, larger version of U01234.MIGRATE. The copy fails. Worst still, the system catalogue *has not been updated!!* This means that the system catalogue says that the dataset is on USER01 when in fact it isn't! But KT wants to keep the same name so what should he do? The advisor tells him to enter the following command

```
uncatlg migrate
```

This removes the name from the system catalogue. Now KT can safely enter the command

```
save migrate lrecl 132 on user02
```

Since there is space on USER02 the save is successful. Technically, KT does not have to REGISTER the dataset again since the accounting file already contains the *name* of the dataset. The uncatlg command has no effect on the accounting file.

Here's what *could* have happened had KT not done a thorough situation appraisal. If he had attempted to save the active file onto USER02 *without first uncataloging the name* WYLBUR would have issued the following message

```
-- NOT CATLG'D - ALREADY CATLG'D
```

JW had already warned him of this condition. It meant that the active area was copied to USER02 but because the name was already in the system catalogue, the catalogue was not updated. So, the dataset would be on USER02 but the catalogue would say that it was on USER01! Now if KT doesn't panic he can still get himself out of trouble. A quick glance into the WYLBUR reference manual indicates he should enter the following commands

```
uncatlg migrate
catlg migrate on user02
```

The uncatlg command removes the name from the system catalogue while the catlg command reenters the name back into the catalogue but with the correct entry for the dataset's proper location. KT can now proceed with the analysis.....

....When JW returns, KT shows him the results of his work. Sure enough many card users are migrating to interactive systems. But projections indicate that many will still be using cards when the keypunches finally become extinct in the Fall. There's no time

continued...

Getting Started continued

to lose. Users must be told! The Masses must be warned!! The doubters must be advised of the new world!!! A NEW ERA IS DAWNING!!!! WYLBUR IS THE

WAY!!!!!! (JW still has a tendency to get a little carried away).

Ihor Prociuk

Statistical Computing Users Group (SCUG)

Users of statistical products of UTCS were invited to attend a meeting in January, 1983 at which UTCS staff shared information which they obtained at the 8th annual SAS Users Group International (SUGI) conference. Many who attended this meeting believed that a group which would serve the needs of users of statistical computer packages should be created. Therefore, meetings were organized by UTCS in February and March to discuss the formation of SCUG, which would be run by the users.

At the previous two SCUG meetings the need for the group was discussed. At the last meeting on March 23 (the SCUG organizational meeting), it was decided that since approximately 40% of the use of the UTCS IBM is in statistical applications, SCUG would be a useful organization for:

1. **Lobbying:** to voice to UTCS problems and concerns with statistical packages, and to advise UTCS on the needs of statistical users currently not being met by UTCS; and
2. **Sharing ideas and knowledge** by way of seminars on programming techniques within specific statistical packages, and by open forums for statistical users to discuss technical and programming problems and to share knowledge.

Consequently, two types of SCUG meetings may exist: 1) seminars; and 2) open forums for lobbying and sharing knowledge.

Also, at the organizational meeting, the possibility of a group executive to organize

future meetings was discussed. Mrs. Mary-Jean Clements volunteered to act as Chairman for three months (April-June 1983) and Dr. Paul Corey offered his assistance as a Faculty Advisor in matters concerning SCUG. A permanent Chairman and Vice-Chairman are yet to be decided.

SCUG is looking for ideas for:

1. seminars
2. agenda items for open forum discussions such as:
 - problems on statistical products that you would like to inform UTCS about.
 - programming techniques you have discovered that you would like to share with other programmers and UTCS advisors.
 - advanced programming problems or technical problems that you would like help on from UTCS or from other programmers.

Please communicate your ideas and comments in writing to:

Mrs. M.J. Clements
SCUG
Department of Pharmacology
Medical Sciences Building
University of Toronto

SCUG is still in its developing stages. We hope it will prove to be a useful and effective body both to statistical computing users and to UTCS.

continued...

SCUG continued

The next SCUG meeting: Seminar and Discussion will be held on Thursday, June 16, 1983 from 12:00 to 1:00 p.m. The topic will be "More Efficient Use of SAS with

Large Applications".

Hope to see all you statistical users there!

Mary-Jean Clements

SCRIBE on the DECsystem-10!

The text formatting package 'SCRIBE' is now available on UTCS's DECsystem-10. This new formatter provides a considerably improved formatting environment for DECsystem-10 users, and promises to become (along with UNIX's nroff/troff) one of UTCS's major formatting packages.

SCRIBE is currently able to produce output on highspeed printers, on the user's screen terminal, and on various typewriter terminals. On the typewriter terminal it is able to take advantage of features such as half-spacing to support full super-scripting, sub-scripting, and proportional spacing. We expect, in the near future, full support for UTCS's CAT phototypesetter and for some type of local printer.

In the future it may be possible to support typesetters such as the Linotron 202 at the U of T Press, and sophisticated output on devices such as the XEROX 9700 printer. In addition, SCRIBE may be made available on UTCS's IBM systems.

Currently UTCS is working on a SCRIBE introductory course and will be producing some local SCRIBE documentation. Users

can currently purchase the base SCRIBE documentation (as prepared by the SCRIBE distributor) from the UTCS Information Office. This documentation consists of two parts:

- **SCRIBE User Manual:** A tutorial-like introduction to the basic SCRIBE package. Current DECsystem-10 text processing users (using SOS) may well be able to learn SCRIBE from this manual alone.
- **SCRIBE Pocket Reference:** A booklet which provides information about SCRIBE for reference purposes.

DECsystem-10 users currently using RUNOFF need not fear that the acquisition of SCRIBE will cause UTCS to remove RUNOFF. RUNOFF will continue to be available on the DECsystem-10 for the foreseeable future, and no user will be forced to move from RUNOFF to SCRIBE. For further information on the status of RUNOFF, see the article titled "Reduced RUNOFF Status at UTCS."

John Bradley

WYLBUR 6.0 at UTCS

WYLBUR 6.0 is now the production WYLBUR system at UTCS. Users who have not yet logged on will find quite a few interesting things about this new WYLBUR.

First of all, the signon character has been changed from a 'W' to a 'U'. Therefore, if a user's signon identification was 07537, he

will sign in using U07537 rather than W07537. Although this change appears simple, users may not be aware that supporting the 'W' signon character required several major system modifications to WYLBUR by UTCS since the 'W' was not standard. We have removed most of these modifications as part of attempting to lower

continued...

WYLBUR 6.0 continued

system overhead by running unmodified systems whenever possible. Should the user enter a 'W' rather than a 'U', he will be prompted for the 'U'. Both the UTCS WYLBUR tutorial and WYLBUR USER-BOOK Sections have been modified to reflect these changes. The novice user may want to enter DO TUTORIAL? and/or DO USERBOOK? to obtain information on these documents. Both are available online and may be printed as is the case for other documents mentioned in this article.

There is much in WYLBUR 6.0 to interest the experienced user. UTCS has prepared a new features guide. The user only needs to enter DO NEWFEAT? to obtain information on this documentation. There are several new features that are quite helpful to WYLBUR users. First, the prompt character has been changed from '?' to '>' when the user is in upper and lower case mode. Being in the wrong mode can be frustrating and wasteful of time and resources. A second collection of very useful features is called QWIK files. These allow users to manipulate any number of text files concurrently, without paying penalties in performance or usability. To obtain information on these, enter DO QWIK?.

WYLBUR 6.0 has also improved its documentation system and a complete online reference card is available. To obtain infor-

mation, type DO REFCARD?.

Similarly, UTCS has made available both the WYLBUR 6.0 Reference Manual and User Guide. Online information can be found by entering DO REFMAN? or DO USRGUIDE?.

There are two UTCS modifications of which users should be made aware. First, /*JOBPARM Q=F should not be used because of planned system changes by UTCS. Users must use the 'fetch' parameter on the RUN command instead. Also, the 'norebuild' feature of WYLBUR, the feature in which WYLBUR was prevented from building a // JOB statement is now processed through an Exec file, rather than through a major system modification. Users may obtain information on this by entering, DO NOREBILD?.

There are additional changes which may affect users; all changes are documented in the WYLBUR news facility. All WYLBUR users are urged to DO NEWS to obtain complete information.

Users who have any questions regarding WYLBUR should contact Central Advising at 978-HELP.

Herb Kugel

Reduced RUNOFF Status at UTCS

The acquisition of SCRIBE for the DECsystem-10 has necessitated the reduction of support for RUNOFF on the DECsystem-10. This change of status was required for two reasons:

- UTCS has only the resources to support two formatting environments at a high level. SOS/SCRIBE and UNIX text processing were selected as the two environments which had the greatest future potential, and provided the most flexibility for our users.

- The version of RUNOFF which has been provided on the DECsystem-10 contains many bugs and has been found to be impossible to maintain by UTCS. In addition, UTCS has no other source of support for it.

For these two reasons, RUNOFF has been assigned class 'C' support by UTCS. In addition, no further RUNOFF training will be provided by UTCS to new RUNOFF users. The reader should note that the change in status of RUNOFF **does not** affect the

continued...

RUNOFF Status continued

status of SOS. SOS will continue to be a class 'A' supported product.

Although RUNOFF has been reduced in status, RUNOFF users need not be afraid that RUNOFF is going to disappear. UTCS has no plans to remove RUNOFF from the DECsystem-10, and has no plans to force users to move away from it, although UTCS hopes that current RUNOFF users will find SCRIBE an attractive alternative! Furthermore, all RUNOFF documentation will be kept online on the DECsystem-10 so that new documentation can be printed

by RUNOFF users when required. In addition, for the immediate future some RUNOFF advising to assist in the resolution of problems (where possible) will continue to be available from UTCS.

Current RUNOFF users may wish to consider moving to SCRIBE. For more information on SCRIBE as a RUNOFF replacement, or about other UTCS-supported alternatives (on other machines), please call Dawne Smith at 978-4548.

John Bradley

Installation of May 1982 Release of SHARP APL

We expect to have installed the May 1982 release of SHARP APL at UTCS by the time this issue of *COMPUTERNEWS* reaches you. This release was announced in the March issue of *COMPUTERNEWS*, and is described in some detail in a document which may be accessed using the workspace: 1 NEWRELEASE.

There are several public library workspaces which will be updated as a result of this installation. The updates will occur at the same time as the release installation, or shortly after the installation. The workspaces which will be reinstalled include:

1 FILEAID This workspace contains some useful functions which can be used in conjunction with the SHARP APL file subsystem. It includes utilities for: printing a file on a terminal, reading and modifying file access matrices, and interpreting the Time/Date stamp of file component information. Also included are cover functions for the system file functions.

1 FORMAT This workspace contains defined functions which are complementary to the system function `□FMT`. `□FMT` is a formatting facility which may be used for producing reports involving tabular formatting

of numeric and character data.

1 SATN41 This workspace contains two functions which produce the character representation of an enclosed array. These functions model extensions which are being implemented for the primitive format function. 1 SATN41 will eventually be dropped when these extensions have been satisfactorily implemented.

2 ARBOUT This workspace contains a cover function for the SHARP APL system function, `□ARBOUT`. In addition there are four tables, one for each terminal keyboard overlay convention presently supported in SHARP APL. Each table shows the standard interpretations (if any) for each bit combination which can result through use of `□ARBOUT`.

There are documentation variables in each of these workspaces which may be examined for further information. The documentation variables of each workspace are gathered into an APL group by the name of DOCUMENTATION. Please watch the APL HOTNEWS facility for further information.

Mary Ann Lawry

Changes Affecting XFR and ARJES Users

In the near future there will be a change which will have an impact on file transfer XFR jobs. In the past it was necessary to specify CLASS=W on the Job Card of the JCL for any file transfer XFR job, to or from APL. The use of CLASS=W for anything other than an HSJS job will shortly become illegal. The correct class which should be specified now, and must be specified after this change takes place, is CLASS=Y. As far as we know, this will be the only impact. However there may be others; if so they will be announced in the APL HOTNEWS facility.

This affects all XFR jobs, whether they are submitted from APL or from some other service. The following discussion will focus on the problem of XFR jobs submitted from within APL.

We are in the process of making the necessary changes to public library workspace which build or use JCL for XFR. As these workspaces are changed an announcement

will be made in APL HOTNEWS. If you have saved your own copies of such workspaces you should then recopy them.

Any APL user who has a utility which submits jobs to be executed outside of APL may be impacted by this change. Jobs may be submitted for subsequent execution by the operating system using the function SUB from the APL workspaces 5 ARJES or 5 ARJU, or the function SUBMIT from the workspace 1 XFR. If the JCL you are submitting includes an “// EXEC XFR” card, then you are submitting a file transfer job, and YOU WILL BE EFFECTED BY THIS CHANGE. In this case you must make the change from CLASS=W to CLASS=Y before the middle of July. If you have any problem making this change, or if you are not sure you are affected by the change, please do not hesitate to call me at 978-6878.

Mary Ann Lawry

Trimming the APL Public Library

On or about July 1, 1983, eight public library workspaces will be deleted from the UTCS SHARP APL system. These workspaces are out of date; some have been superceded by other workspaces in the public libraries. In some cases, the workspaces no longer work. The affected workspaces are listed below. Please examine the list, and if you have any comments call Mary Ann Lawry at 978-6878.

1 APL4: This workspace contains a description of Level 4 of Sharp APL which was installed at UTCS in December 1974. The information in this workspace is old and largely out of date.

1 CONVERTDOC: This workspace contains documentation on the conversion

from MVT to MVS APL, which occurred in August 1980. This information is now available through the workspace: 1 NEWRELEASE.

1 FILES: This workspace is essentially identical to the workspace 1 FILEAID.

1 SCANDOC: This workspace was entered to document the ‘new’ APL primitive function, ‘SCAN’ which became available in 1975. This function is no longer new and the workspace itself does not seem to work.

1 ΔFMTHOW The introduction of the quad function □FMT completely replaces the older ΔFMT function. This workspace is no longer needed.

continued...

APL Public Library continued

2 APLSYMBOLS: This workspace contains a summary listing of the operators and functions available on the old APL 360 system.

4 COMPLEX: This workspace contains functions able to perform arithmetic operations on complex numbers. Sharp APL now supports complex numbers, so 4 COMPLEX is no longer needed.

4 WSL: This is an OLD workspace lister,

which has long since been replaced by 4 DOCWS.

In the next few months there will be other changes made in the public libraries. Please watch the APL HOTNEWS facility for further information and announcements regarding these changes.

Mary Ann Lawry

Pattern Matching Using SOS

The SOS editor on the DEC-10 has many features. One very useful feature is the special characters provided for searching and substituting. When you are prompted with an * in SOS, type H<CR>. This will print out online documentation about SOS. At the end, there is a list of special characters and their functions. The following examples, using the substitute command, show how they can be used.

In the substitute command, the search string is between the S and the first \$ (ES-Cape), the replacement string is between the two \$s (ESCapes), and the range of lines where the substitution is to take place follows the second \$ (ES-Cape). For example: *Soldstring\$newstring\$10:100

Example 1

You entered in a FORTRAN program but forgot to leave 6 blanks at the beginning of each line. One command will fix this.

S^E^X\$ \$^:*

This is the substitute command with a strange character sequence for the search string. The command causes ^E^X to be replaced by 6 blanks from the first line to the last line. Here is the breakdown:

S is the substitute command
^E is Control-E and to SOS means match

any character except the following one
^X is Control-X and matches any character, but by following the ^E, together they match no character. This occurs at the beginning of each line.
\$ is the ESCape key, an SOS delimiter
" " are the six blanks that are to replace the start of each line.
\$ delimiter again
^ is the first line in the file
: is the line range delimiter
* is the last line in the file.

Example 2

Lets say you have a file of dates.

12-DEC-82
1-FEB-83
14-DEC-76
3-DEC-54
1-JAN-76

The program you want to use to read these dates needs dates like 1-FEB-83 changed to 01-FEB-83 (add zero). Again only one command is needed.

S^E^X^X-\$0^V2^V-\$^:*

This looks intimidating, but isn't really.

S is substitute command
^E^X is Control-E Control-X, the start of line again

continued...

Pattern Matching Using SOS continued

^X is Control-X and matches any single character
- matches only a -. So **^E^X^X-** matches any single character followed by a dash at the beginning of a line.
\$ is the ESCape delimiter

Let us examine the replacement string: **0^V2^V-**

0 is a zero, which we want to add
^V2^V is Control-V 2 Control-V which means the second partially matched string from the search string. This will get the character that was before the dash. The first match was **^E^X**, the start of the line, the second match was **^X**, the single character.
- puts back the dash
\$ is the ESCape delimiter
^:* is the first to last lines as before

Example 3

Your brain was sleeping when you entered a SAS program and the **;** was forgotten at the end of about half the lines (you're probably a FORTRAN programmer, I use this command a lot). A single command which fixes the program is:

S^E;^E^X\$^V1^V;\$^:*

Briefly this would mean: change anything, except a semicolon, at the end of the line to a semicolon, from the first to the last line. Here is the breakdown.

S is the substitute command
^E; is Control-E semicolon which matches anything but a semicolon
^E^X is Control-E Control-X which matches "NOT ANY CHARACTER". This may be the same as we used for the start of the line. In this case, the only time we can have a character followed by no characters is at the end of the line.
\$ the ESCape delimiter
^V1^V is Control-V 1 Control-V and gets us back the last character in the line whatever it was (it wasn't a semicolon, that's all we know!).

; is the semicolon to be added.
\$ the ESCape delimiter
^:* is first to last line as before.

Example 4

Let us use our dates as an example again.

12-DEC-82
 1-FEB-83
 14-DEC-76
 3-DEC-54
 1-JAN-76

When we get into the years after 2000, these dates are in danger of not containing enough information. (Think about this folks, there are serious implications to a lot of people's data out there.) We want to add a 19 in there to keep these dates useful (i.e., 12-FEB-1983). Once again a one command fix can be used.

S^A^X-^A^X-\$^V1^V-^V2^V-19\$^:*

There are two other commands that would do this, both of which are simpler, but this uses another special character that the others don't, **^A**. **^A** is Control-A and matches any number of the character that follows it, in this case any number of any character. In this command we change characters followed by -, followed by characters, followed by - to the same mess, followed by 19. It works! Here's the breakdown:

S is the substitute command
^A^X is Control-A Control-X and matches any number of characters, in this case it matches 1 or 2 digits.
- matches a dash
^A^X is Control-A Control-X and again matches any number of characters, in our case the month.
- matches the second dash
\$ the ESCape delimiter
^V1^V is Control-V 1 Control-V and gets us back the first digit(s).
- puts the dash back
^V2^V is Control-V 2 Control-V and puts back the month

continued...

Pattern Matching Using SOS continued

- puts back the second dash
- 19 is the 19 we want to add in there.
- \$ the ESCape delimiter again
- ^:* is first to last line again

With a little practice these special characters get easier to use. Before using one of these global changes it might be wise to save the changes you have made in case you substitute incorrectly. By doing this, you can abort the edit and start at the point just before the incorrect substitute command. If there are a lot of changes and you don't

want to see them on the screen, use the ,N option of the substitute command. For example, S^E^X\$ \$^:* will put 4 blanks at the beginning of each line in your file, and lists each line as it does it. S^E^X\$ \$^:*,N does the same but without displaying each line. Note that by using the ,N option you won't see an incorrect substitution if it's made. Use it only when you get good at substituting.

Terry Jones

SAS Utilities

SAS can do a lot more than just statistics. This article describes some of the utilities available within SAS.

Among the things that SAS can do for you are:

1. Release all or any part of the unused space in your data sets. Note that // EXEC RLSE documented in 3.3DISKDM can only be used to release ALL the unused space, not just parts of it. (PROC RELEASE)
2. Concisely list information for your files on a standard-labeled tape volume. (PROC TAPELABEL)
3. Produce large block letters suitable to use as a cover on your computer generated reports. (PROC EXPLODE)
4. Unload your partitioned data set so it is readable by any system. (PROC SOURCE)
5. Copy standard or non-labeled tapes optionally, changing label or density. An output tape containing files taken in any order from one or more tapes using SAS's PROC TAPECOPY can also be produced. Other features include requesting full error recovery (which allows some marginal quality tapes to be read successfully).

All these SAS provided utilities and more

are documented with clear examples in SAS documentation. Invoking SAS is generally simpler than most non-SAS utilities. For example, the following job will copy a standard-labeled tape, N0001, to a standard labeled tape N0002:

```
/*SETUP UNIT=3400-5,VOL=(EXT=N0001)
/*SETUP UNIT=3400-5,VOL=(EXT=N0002,W)
// EXEC SAS,OPTIONS='NOINCLUDE,
// NOGRAPHICS,NOMACROS'
//VOLIN DD UNIT=TAPE,VOL=SER=N0001,
// DSN=DSNAME.OF.FIRST.FILE
//VOOUT DD UNIT=TAPE,VOL=SER=N0002
//SYSIN DD *
PROC TAPECOPY NOLIST ;
/*
```

The third line of JCL in the above job invokes SAS. The OPTIONS specified make this job cheaper by telling SAS that all its features are not needed. The DSNAME on the VOLIN DD line is required -- this is a security feature to make sure you are copying from the right tape. The NOLIST option on the PROC TAPECOPY line will result in only a short set of messages being printed. These should be sufficient to determine that the job worked. (This job was run using SAS and TCOPY62 on a three file tape containing 700 short blocks with SAS costing about a dollar more to run. However note that SAS TAPECOPY has features which TCOPY62 does not.)

continued...

SAS Utilities continued

SAS has many more utilities, programs, and services which cannot be mentioned in this short article. Why not go to the Information Office and take a look at the SAS manuals?

For more information on the above utilities you can phone the Advising Office at 978-HELP.

Alex Nishri

PL1 Release 4.0 at UTCS

Some PL1 users may be aware that UTCS has been attempting to install Release 4.0 of the PL1 Optimizer compiler for some time. There have been several major bugs in the distribution tapes that were shipped to us, and it took the vendor a considerable length of time before a valid set of distribution tapes were shipped. We have installed PL1 Release 4.0 on the IBM 4341 where several users are interested in testing it and will soon be installing the processor on the

IBM 3033N where it will be available to our users. This new PL1 is primarily a maintenance release and offers no significant new features to the user community. Please watch HOTNEWS for installation information, but in the meantime, if you have any questions call Central Advising at 978-HELP.

Herb Kugel

COBOL Processor Cleanup

UTCS supports IBM VS COBOL and keeps, as a backup, ANSI COBOL (Version 3). On May 2, UTCS removed the obsolete IBM COBOL (F) and ANSI (Version 2) processors from the system. These processors are completely obsolete and no longer supported by IBM. Therefore, on May 2, the following procedures became unavail-

able: COBFC, COBFCLG, COBFLDGO, COBFLG, COBUC, COBUCLG, COBUCG, COBULG.

If you have any questions, please contact Central Advising at 978-HELP.

Herb Kugel

ATMS Phaseout at UTCS

UTCS is currently in the process of phasing out the ATMS service. The phaseout process has been underway since March of 1983 and will conclude with ATMS' last day of service at UTCS on July 15th, 1983.

Where appropriate, UTCS is encouraging those users who can afford it to move to standalone systems (either microcomputer systems or Word Processors) for the type of

text processing work that they did on ATMS. However, UTCS has a set of alternative text formatting systems to which users can move, if both of these non-UTCS alternatives prove unsuitable.

- Those users who have been using ATMS via 3270-type terminals (and are, hence, tied to the IBM system) will be able to use WYLBUR with the SCRIPT editor.

continued...

ATMS Phaseout continued

UTCS does support WYLBUR with documentation, courses, and advising support. SCRIPT, although recognized at UTCS as a Class 'B' program, is also supported through the availability of documentation and some advising support. In addition, UTCS will offer to current ATMS users a special SCRIPT course to assist them in the conversion process.

- Users who have access to ASCII-type terminals may choose to move to SOS/SCRIBE on the DECsystem-10. SCRIBE is a new package at UTCS (see the article entitled 'SCRIBE on the DECsystem 10' in this issue of *COMPUTERNEWS*), but is expected to become an important formatting package here. Both SOS and SCRIBE will be given Class 'A' support, and users will have access to documentation, instruction, and advising support through UTCS.
- Other users who have access to ASCII terminals may choose to move to UNIX-based text processing (on the PDP 11/70). Like SCRIBE, this service will receive full UTCS support. UNIX-based text processing might be of partic-

ular interest to those people with the need to prepare mathematical equations, or complex tables.

In addition to offering these alternative services, UTCS has developed techniques whereby text which has been entered and stored under ATMS will be retrievable even after ATMS service is terminated. However, in order to take advantage of this service ATMS users must take action **now**. To find out what to do, please call me at 978-3995.

UTCS has been attempting to ensure that all ATMS users are aware of ATMS's imminent demise. In addition to other *COMPUTERNEWS* articles, and two previous mailings to all ATMS users, UTCS has been trying to contact users -- either directly by telephone or through a single departmental staff member such as a departmental secretary. If you are currently an ATMS user and need advice on what to do when ATMS goes away, please call me at 978-3995.

John Bradley

Hours of Service

The following hours of service are in effect for:

Canada Day

	July 1 (Friday)	July 2 (Saturday)	July 3 (Sunday)
3033/N12 GPJS (Classes B,C,E), TSO, Calcomp	closed	10:00-18:00	10:00-18:00
3033/N12 GPJS (Class A), HSJS, WYLBUR, APL, ATMS	unattended	10:00-18:00*	10:00-18:00*
DEC1090, 11/70	unattended	10:00-18:00*	unattended
BICS	unattended	unattended	unattended
LIBRA	unattended	unattended	unattended

* Running unattended outside these hours.
Normal hours of service for all systems will resume Monday, July 4, 1983.

Hours of Service continued

Civic Holiday

	July 30 (Saturday)	July 31 (Sunday)	August 1 (Monday)
3033/N12 GPJS (Classes B,C,E), TSO, Calcomp	10:00-18:00	10:00-18:00	closed
3033/N12 GPJS (Class A), HSJS, WYLBUR, APL, ATMS	10:00-18:00*	10:00-18:00*	unattended
DEC1090, 11/70	10:00-18:00*	unattended	unattended
BICS	unattended	unattended	unattended
LIBRA	unattended	unattended	unattended

* Running unattended outside these hours.
Normal hours of service for all systems will resume Tuesday, August 2, 1983.

Labour Day

	Sept. 3 (Saturday)	Sept. 4 (Sunday)	Sept. 5 (Monday)
3033/N12 GPJS (Classes B,C,E), TSO, Calcomp	10:00-18:00	10:00-18:00	closed
3033/N12 GPJS (Class A), HSJS, WYLBUR, APL, ATMS	10:00-18:00*	10:00-18:00*	unattended
DEC1090, 11/70	10:00-18:00*	unattended	unattended
BICS	unattended	unattended	unattended
LIBRA	unattended	unattended	unattended

* Running unattended outside these hours.
Normal hours of service for all systems will resume Tuesday, September 6, 1983.

In the event of any changes to the above schedules, a notice will appear in the July/August issue of *COMPUTERNEWS* and also in *HOTNEWS* one week prior to the holiday.

Summer hours of service for the University of Toronto will be in effect July 4 until September 2, 1983. UTCS' office hours will be 08:45 to 16:30 during this time.

Documentation for Courses

At present UTCS attempts to keep a modest stock of vendor and UTCS supplied manuals in stock at the Information Office. Hence, Professors and Instructors who may require us to stock large volumes for courses next Fall are requested to forward their orders to the UTCS Information Office, Engineering Annex, Room 206 no later than July 15, 1983. This is to ensure

availability by September 15, 1983.

For a list of some manuals carried by the Information Office, refer to the April issue of *COMPUTERNEWS*. Further queries may be directed to Dale Wright, Information Assistant at 978-4990.

Dale Wright

UTCS Summer Non-Credit Short Courses

This summer UTCS will be offering a number of non-credit short courses on the various products and services that we support. These courses are available to students, faculty, and staff of the University of Toronto, as well as to external users of our services. Courses are held in the UTCS Education Facility, Room 221, McLennan Physics. Anyone interested in taking these courses must register in advance, either in person or by phone, with:

Education Facility Co-ordinator
McLennan Physics, Room 217
978-4565

A \$10.00 registration fee, payable in cash or non-computing appropriation, must be paid one week before the course is scheduled to begin. Registrants are also required to hold a valid Service Access Code (SAC) for use during the course.

Depending on the demand, these and other courses will again be available in the Fall. Please note that we reserve the right to cancel courses, if registration is too low.

Anyone interested in credit courses should contact the Department of Computer Science at 978-6360.

DDS101 - Introduction to IBM Disk Datasets

This course is a prerequisite course for anyone who is planning to take the WYLBUR short course.

Date: June 17
Time: 2:00 - 4:00

Date: July 15/August 19
Time: 10:00 - 12:00

DEC101 - DECsystem-10 Novice Users

Date: June 7/August 16
Time: 9:30 - 4:00

DEC201 - DECsystem-10 Assembler

Date: June 20-24
Time: 10:00 - 12:00

DEC301 - DECsystem-10 Advanced Users

Date: June 9/August 18
Time: 9:30 - 4:00

JCL101 - JCL for Beginners

Date: July 4 - July 8
Time: 2:00 - 3:00

SAS101 - Introduction to SAS

Date: June 20-24/July 11-15/August 8-12
Time: 2:00 - 3:00

SAS201 - Intermediate SAS

A new approach is being taken in the teaching of SAS201. This course has now been broken up into five separate, one hour sessions, each covering a specific topic. Students have the option of choosing which topics are of interest to them and may register for as many sessions as they desire. Sessions 4 and 5 cover new topics which are only now being introduced.

Below are the session breakdowns for SAS201.

Session 1 - Input Formats and Report Writing

Topics of Discussion: SAS formats, pointer controls and format modifiers, PUT and FILE statements, LAST and FIRST byvariable. Some examples of how these statements can be used together to produce customized reports.

Session 2 - SAS Regression Procedures

Topics of Discussion: Several procedures in SAS that are used for regression analysis.

continued...

Short Courses continued

Similarities and special features of these procedures will be discussed giving the student a better understanding of how to decide which procedure to use.

Session 3 - SAS Multivariate Procedure

Topics of Discussion: Procedures for analysis of variance, multivariate analysis, discriminant analysis and clustering. Overview of these procedures and their uses will be presented.

Session 4 - SAS Macro Language

Topics of Discussion: SAS Macro language which has been greatly expanded in SAS82. New macro features will be discussed and potential uses and abuses will be examined.

Session 5 - PROC TABULATE and PROC CALENDAR

Topics of Discussion: TABULATE which constructs tables of descriptive statistics from compositions of classification and analysis variables; CALENDAR which displays data from a SAS data set in a month-by-month calendar format; examples

of these two new procedures will illustrate flexibility and usefulness.

Date: May 30 - June 3

Time: 2:00 - 3:00

TXT103 - Text Processing on UNIX for Beginners

Registrants must arrange to set up a UNIX account prior to the beginning of the course.

Date: August 8 - 12

Time: 9:30 - 12:30

WYL101 - Introduction to WYLBUR

Registrants must arrange to set up a WYLBUR account prior to the beginning of the course.

Date: June 27-29/July 18-20/August 22-24

Time: 10:00 - 12:00

Irene Rosiecki

Facilities Management

ZAT & ZUT Going

The Zoology terminal sites for undergraduates and research users, which were operated by UTCS, closed on June 1, 1983. CDC batch job entry equipment (consisting of a card reader, printer, control unit, and operator's console) has been returned to the vendor. All IBM 029 keypunch machines are for sale. If anyone is interested in purchasing keypunch equipment, contact Mrs. Vera Cabanus at 978-7107.

At present, UTCS does not plan to re-equip or re-open the Zoology site, and therefore will no longer provide services in the Ramsay Wright Building.

EUT Converting to BICS

The first floor of the Engineering Annex will undergo a considerable change before Fall classes begin. All keypunch machines in EUT will be removed and new XT100 terminals installed. Terminals for undergraduate use will be connected to the Basic Instructional Computing Service (BICS).

This equipment upgrade will require a temporary closure of the keypunch area during the Summer. Hopefully this will only cause minimal inconvenience to users. Signs announcing the date and length of this closure will be posted in advance. We hope that all Annex users will enjoy using the more modern technology this September. Re-

continued...

Facilities Management continued

placement of undergraduate keypunches should also contribute to the improvement of working conditions in the Engineering

Annex.

Vera Cabanus

Documentation at UTCS

During February and March, all CAN holders and active SAC holders received a UTCS Documentation Survey along with a list of the latest USERBOOK revisions and our current price list.

I would like to thank users for their comments; re-evaluating UTCS documentation is a big project which should not be done by the Publications group in a vacuum, without users' input, opinions, and/or suggestions. Even though we may be unable to act on every suggestion, the general trend of our users' input will be taken into consideration.

90% of the users who responded to the Survey found USERBOOK of occasional benefit. Over 1/3 of these respondents felt that USERBOOK is very much to their benefit. The results, with regards to Microfiche, were not so positive. For this reason, the Publications/Information Office will not research the Microfiche format and its implementation at UTCS at this time, but may re-evaluate the possibility at a later date.

The following is a summary of the UTCS Documentation Survey:

1. Do you find USERBOOK of benefit?

Very much	36%
Occasionally	56%
Definitely not	4%
No answer	4%

2. USERBOOK on Microfiche

Very much	8%
Possibly	21%
Unlikely	29%
Definitely not	39%

No answer	3%
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3. Other manuals on Microfiche

Very much	8%
Possibly	21%
Unlikely	28%
Definitely not	35%
No answer	8%

Most of the users' comments seem to fall into 3 categories and could be summarized by the following quotations:

- "A regularly updated USERBOOK should be a top priority so that users can most efficiently use UTCS' systems and advisors - even if we do have to come and get it ourselves and receive \$0.25 invoices."
- "Given a choice I much prefer online documentation to a fiche reader. Why not make USERBOOK available to WYLBUR, TSO users, and others online?"
- "USERBOOK has few benefits for Administrative users."

I am of the opinion that the following letter from Mr. Willard McCarty, Volume Indexer and Computer Consultant at Drama, summarizes the general problem of the USERBOOK as seen by many of our users:

Dear Ms. Cabanus:

In my two or more years' experience with UTCS documentation, and the USERBOOK in particular, my difficulties have not been with acquiring documentation but with finding my way around in it. I realize that your major concern, as evident in your questionnaire, is elsewhere, but your question of ef-

continued...

Documentation at UTCS continued

iciency in distribution seems to me to involve another of efficiency in organization of the material itself. I have seldom found USERBOOK useful because so little thought appears to have been given to the outsider, who does not know what many of the terms mean and who may not be able to guess under what category the information he is seeking may have been filed. By 'outsider' I mean someone whose major preoccupations are not contained within UTCS but who, like myself, has had considerable experience with computer systems. To such a person, the USERBOOK seems to be more of an internal UTCS document than anything intended for people otherwise employed. Now I am in part an indexer by profession, so it is perhaps in my nature to consider the index of a reference work a primary means of entry into the work, but I don't think my personal bias affects my point that the USERBOOK's lack of a thorough and reliable index is a mortal flaw. Surprising things happen when one generates an index to a large and complex work; relationships appear and are made plain which might otherwise remain obscured. At least the novice and occasional user would be more apt to consult the work, and then more apt to find what he is looking for, if an index were provided.

The same remarks apply, I think, to the multitude of HELP files, which as a whole appear not a whole at all but a chaotic miscellany. There, also, an index would help. It seems to me that a computer centre of all places should be able to provide an efficiently organized, randomly accessible body of information on its own services and facilities.

Please accept my remarks in the friendly, though perhaps somewhat impassioned, sense in which they are intended. I realize that what I suggest implies a large undertaking, but can we afford not to undertake it?

Sincerely,

Willard McCarty

Volume Indexer & Computer Consultant

More and more so called 'non-scientists' have begun to use the computer and are slowly regarding the computer as a necessary academic tool. However, most of the present computer oriented documentation (at least in UTCS) was written when only 'scientists' used computers. The scientists and non-scientists differ greatly in their familiarity of the computer environment. To find a proper blend and balance to satisfy both groups in documentation needs is not an easy task. The documentation designed for the non-scientists should accommodate the lack of computer literacy and the unfamiliarity of the computing environment. On the other hand, it must contain enough substance and facts in order to satisfy the scientists' needs.

This task cannot be tackled in a couple of months when you take into consideration the vast volume of the documentation at UTCS. USERBOOK currently has 67 different sections/modules, amounting to approximately 1800 pages of technical 'jargon'. There is over 1000 pages of other UTCS produced documentation as well.

A member of the Publications group assigned to documentation is currently concentrating most of her efforts on transferring files from the ATMS environment. This completed task must be accomplished by July 15, 1983 when ATMS is phased out. The reformatting of all documents under the new system could easily absorb most of this summer, thus not leaving much time for updating and rewriting.

UTCS has recognized the need for better documentation and through its recent reorganization has established the position of Documentation Editor and Co-ordinator. This person will be supported by product specialists, all of whom are reporting to the Applications Support and Advising Supervisor. This reorganization will also mean that Section 1 of USERBOOK (which describes the organization and functions of UTCS)

continued...

Documentation at UTCS continued

will be delayed.

Vera S. Cabanus

Change Committee

Users wishing to suggest changes should contact their Marketing Representative. Users should contact the Advising office at 978-HELP if they encounter problems.

1. Release 4.0.0 of PL/I is now being tested on the Administrative machine for future installation as the default release.
2. UTCS now provides CALCOMP support for the DECsystem-1090. GOULD support for the DECsystem-1090 is planned for the future.
3. The May '82 release of SHARP APL is scheduled to become the default release as of May 28.
4. The new release of SAS 82 is scheduled to become the default release on May 16 on both the Academic and Administrative systems.
5. The operating system on the DECsystem-1090, TOPS-10, will be upgraded to version 7.01A in the future.
6. Release 6.0 of WYLBUR was installed

- for production on May 2.
7. FAMULUS was installed for testing on the Academic machine on April 20.
8. COBOL F, ANSI Version 2, now obsolete, was removed from the Academic system on May 2.
9. The lease on the IBM 3279 colour terminal was cancelled on April 30.
10. An EXEC file for NOREBILD on WYLBUR was installed on April 4.
11. UTCS is planning to install SCRIBE, a text formatter, on the DECsystem-1090 in the near future.
12. UTCS will be installing a XEROX 2700 laser printer for testing from June 1 to August 1.
13. The support level of RUNOFF on the DECsystem-1090 will now be CLASS C effective June 1.
14. As of April 4, PACX now has dialout capabilities.

Cecilia Welch

Personnel Changes

Since the last issue of *COMPUTERNEWS*, UTCS has been reorganized. As a result the following people are no longer with UTCS.

By group, the individuals released are:

Facilities Management Group

Terry Wood, Manager; **Luke Sulatycki**, Supervisor of Hardware Development and Support; **Bob Keith**, BICS Co-ordinator; **Shirly Manimallethu**, Remote Site Supervisor.

Consulting and Information Services Group

Frank Spitzer, Manager; **Elizabeth Weitmann**, Publications Assistant and **Terry Farley**, Technical Writer, both from the Publications area; **Sally Holton**, Marketing Support.

Business Group

Joan Coutts, Access Code Clerk and **Rita Chhabra**, Expense Control Supervisor

continued...

Personnel Changes continued**Applications Support Group**

David Reed, Supervisor of Resources.

Aside from those people who left because of the reorganization, **Bob Blackburn**, Co-ordinator of Scarborough, also left for a job at the University of Waterloo. The best of luck go to all these people. They will be missed very much.

A clearer picture of how UTCS is reorganized can be seen by looking at the charts following the article entitled, *Let's Talk About It - Reorganization*.

Kathryn Bourne

Recent Acquisitions in the DCS Library

American Association for Artificial Intelligence.
Proceeding of the 2d National Conference,
Pittsburgh, August 1982.

Holt, Richard C.
Concurrent Euclid, UNIX and TUNIS.
Reading, Mass., Addison-Wesley, 1982.

IMACS World Congress on System Simulation
and Scientific Computation, Montreal,
August 1982.
Proceedings.

Rice, John R.

Numerical methods, software and analysis.
New York, McGraw-Hill, 1983.

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IBM Amagi Homestead, Japan, Sept. 1981.
Proceedings.
Tokyo, IBM Japan, 1981.

Stephanie Johnston

- **Central Advising Office (CAO), 978-HELP, McLennan Labs, 60 St. George St., Room 257**
- **Education Facility (Educ), McLennan Labs, 60 St. George St., Room 221**
- **Engineering Annex (EAT, EUT, CDF), 11 King's College Road, Rooms 103, 104, 107, 201, 203.**
- **Erindale College (Erin), 828-5339, Mississauga Road, Erindale Campus, Rooms 2005, 2039, 2045**
- **New Physics (NPT), Burton Tower, 60 St. George St., Room 1202**
- **Robarts, Robarts Library, 130 St. George St., Room 1061A**
- **Scarborough College (Scar), 284-3122, Military Trail, Scarborough Campus, Room S624**
- **Sidney Smith (AST & ASUT), 100 St. George St., Rooms 1071, 1073, 2105**
- **Victoria University (Vict), 73 Queens Park Cres., Room 012.**

* Research includes graduates, faculty, staff. ** May be unavailable due to UTCS courses.

CAO	Monday to Friday, 10 a.m.-6 p.m.
Erin, Scar	During normal hours

	BICS	Keypunch	LIBRA	PACX	Printers	Oracle	UNIX
AST		Y		Y	Y		
ASUT	Y				Y	Y	
CDF					Y		Y
EAT		Y	Y	Y	Y		
EUT		Y			Y	Y	
Educ				Y			
Erin				Y	Y		Y
NPT		Y		Y	Y		
Robarts	Y				Y	Y	
Scar		Y		Y	Y		Y
Vict	Y				Y	Y	

UTCS Systems

3033/N12 Processor

- located in McLennan Physical Laboratories
- provides General Purpose Job Stream, High Speed Job Stream, TSO, WYLBUR, APL and ATMS services
- 12 megabytes of memory
- MVS with JES2

3033/U16 Processor

- located in McLennan Physical Laboratories
- provides "Glass Keypunch" access to HSJS using BICS
- 16 megabytes of memory
- UTS under VM

4341 Mod II Processor

- located in McLennan Physical Laboratories
- provides administrative IMS/VS, DB/DC, Batch and TSO
- 8 megabytes of memory
- MVS with JES2

DECsystem-10 Model 1090

- located in McLennan Physical Laboratories
- provides General Purpose Time-Sharing
- 512 K - 36 bit words of memory
- TOPS-10 operating system, version 7.01A
- GALAXY queuing, spooling, and batch subsystem, Version 2.0

PDP 11/70

- located in McLennan Physical Laboratories
- provides UNIX text processing
- 640K of memory
- UNIX (Western Electric)

VAX 11/780

- located in McLennan Physical Laboratories
- provides backup, program testing, and inter-communication relating to student services
- provides Spare Cycle Service
- 4 megabytes of memory
- VMS

Communications & Technical Support

- located in Sanford Fleming Building, Fourth Floor
- Micro Computing Lab has various Z80-based microcomputers (S-100, CP/M), IBM Personal Computer, Apple II Plus, Western Digital Pascal MicroEngine, Radio Shack TRS-80
- provides consulting and configuration of microcomputer systems
- offers media conversion services
- maintains copy of CP/M User Group library of public-domain software
- Communications Group provides communications systems, terminals, modems, data channels: consulting and installation.
- Field Service Group installs and maintains small computer systems on a contract basis or on a cost-per-call basis.
- PDP-11 Lab has DEC PDP-11/40 with GT44 Graphics with various disk and tape formats; numerous special peripherals
- provides specialized interactive graphics
- provides online and real-time computing services, data acquisition and conversion, and minicomputer services
- maintains copies of some DECUS public-domain software
- provides consulting on minicomputers; configures and installs minicomputer systems

Computer Disciplines Facility

VAX 11/750 (2 megabytes of memory)

VAX 11/780 (4 megabytes of memory)

- located in Engineering Annex
- provides Computer Science interactive access
- UNIX (Berkeley)

Scarborough System

VAX 11/750

- located at Scarborough College
- provides "Glass Keypunch" access to HSJS using LIBRA
- 2 megabytes of memory
- VMS

Erindale System

VAX 11/780

- located at Erindale College
- provides "Glass Keypunch" access to HSJS using LIBRA and Research access
- 4 megabytes of memory
- VMS

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	Ihor Prociuk	MP217	6875
Erindale College	Peter Wall	2043	828-5311
Scarborough College	William Barek	S628-A	284-3173
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Central Advising	HELP	System Status Enquiries (IBM)	7393
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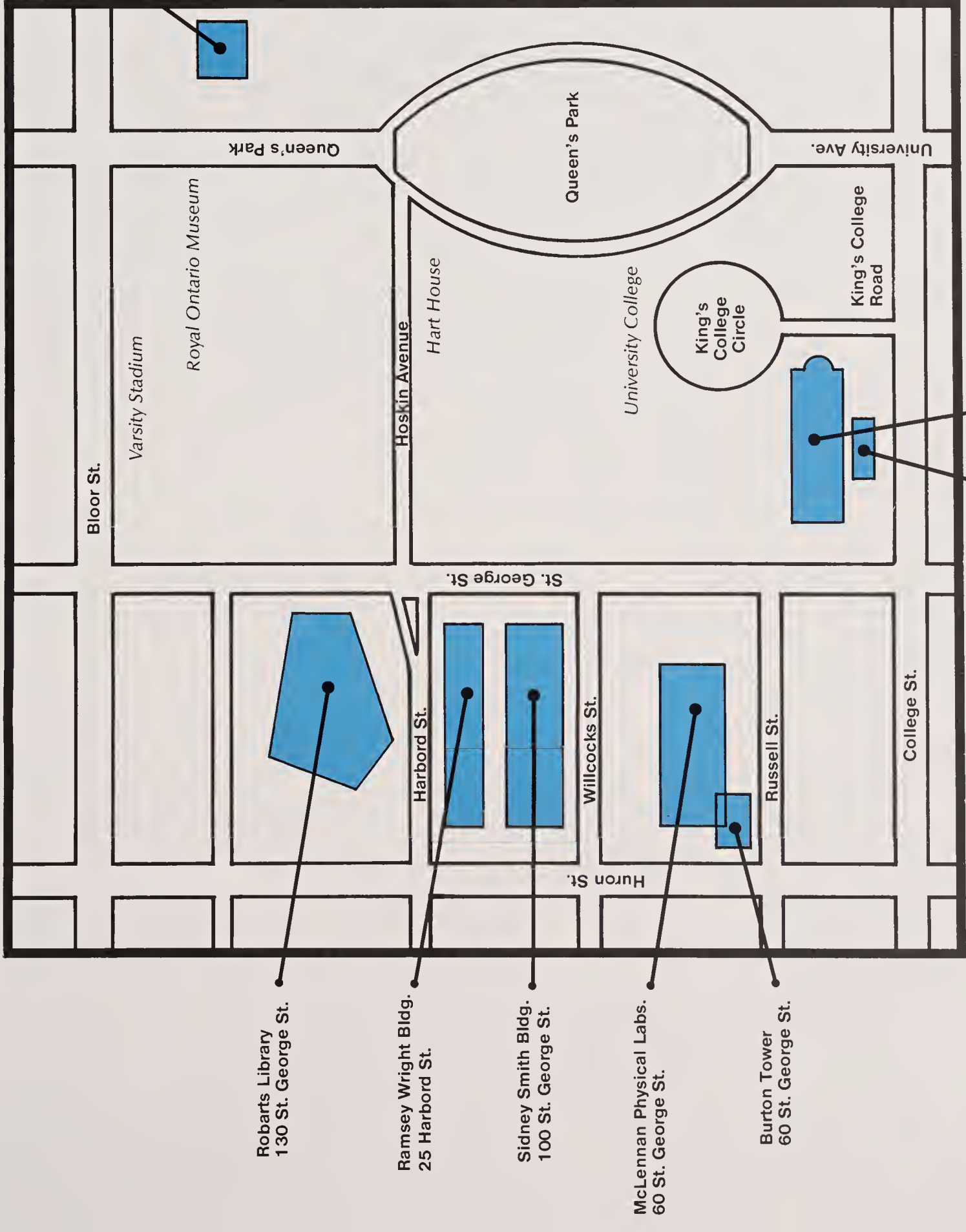
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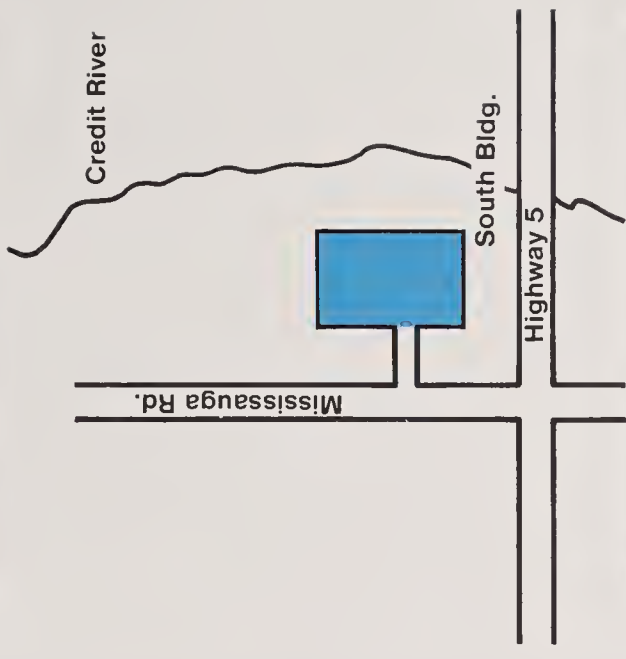
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